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ABSTRACT

This study examined the relationship between environmental factors of teaching climate for beginning teachers and the desire to remain in teaching. Data from 23,088 Public School Teacher Questionnaires from the Schools and Staffing Survey longitudinal database were analyzed to determine the effect of environmental demographic factors (administrative support, enforcement of rules, staff cooperation, adequacy of resources, student achievement level, after-school work load, gender, age, marital status, and second thoughts about career choice) on the intention to stay in teaching for 3,000 beginning elementary public school teachers. All variables listed except staff cooperation were related to beginning teachers' decisions to remain in teaching. Beginning teachers who were single, female, and older than the norm were especially susceptible to the stresses and isolation of elementary school teaching. The presence of administrative support and the adequacy of resources to do one's job far outweighed the negative influence of discipline problems and unending paperwork. The study confirmed that it is crucial for beginning teachers to have a support system to enhance their teaching experience. (Contains 27 references.) (JDD)

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Beginning Teachers: In Danger of Attrition

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Abstract

The objective of this research study is to examine the relationship among the environmental factors of teaching climate for beginning teachers and the desire to remain in teaching. Data from 23,088 Public School Teacher Questionnaires from the longitudinal data base, Schools and Staffing Survey (SASS) were examined. In analysis of this data the study confirms earlier literature suggesting it is crucial that the beginning teachers have a support system to enhance their experiences as beginning teachers.

Beginning Teachers: In Danger of Attrition

Teacher attrition is a growing area of concern for educators across the country. The California Commission on Teacher Credentialing (1993) indicated that after only one year of teaching 30% of beginning teachers left California's metropolitan and rural schools. Nationwide documentation of similar attrition statistics are reported (AACTE, 1984; Futrell, 1989; Gunderson & Karge, 1992; Smith-Davis, 1990). Furthermore the production rate of beginning teachers graduates is insufficient.

Literature in the field of health, occupational dysfunction, and eduction refer to factors in the environment, called social support, that help to buffer the negative effects of job stress. Social support facilitates coping rather than protects people from stress (Fleming, Baum, Grisriel & Gatchel, 1982). Social support generally includes feedback on performance, information relevant to the job, and recognition of selfworth (Moos, 1976).

Support systems in teaching are most likely to come from other teachers, supervisors, and friends. High stress level, lack of support and inadequate working conditions were several of the reasons teachers left teaching according to the Metropolitan Life Survey of Former Teachers in America (1986). Lack of administrative support has been associated with attrition among teachers in several studies (Billingsley & Cross, 1992; Metzke, 1988; National Center for Educational Statistics, 1991).

Chapman (1983) purports once fully certified, it is crucial that beginning teachers have some sort of support system to enhance their experiences as beginning teachers. Similar studies maintain this position (Jensen, 1987; University of Wisconsin-Whitewater, 1989). Other studies report that among teachers who remain committed to the profession, job satisfaction is linked to effective collegial support (Fimian & Santoro, 1983; Weber & Toffler, 1989) and

supportive relations with school-site personnel (Jensen, Mortorff, & Meyers, 1992). Data from the thirty-seven New Teacher Projects in California purport four key elements in the support of beginning teachers: (1) involving experienced teachers; (2) structured time; (3) training for beginning teachers; and (4) individual follow-up (Commission on Teacher Education, 1993). But do these support systems actually influence teachers to stay in teaching? Are there other factors that affect a decision to continue teaching?

Schools and Staffing Survey

In a response to the national educational goals established by President Bush and the state governors of this country, and as a means of supporting research in education, Congress has mandated the collection of large scale national data bases. *The National Center for Education Statistics, U.S. Department of Education, Office of Educational Research and Improvement* was established to "collect, analyze, and disseminate statistics and other data related to education in the United States and in other nations " -Section 406(b) of the General Education Provisions Act, as amended (20 U.S.C. 1221e-1). These national data bases include a wealth of data on students, their families, schools and teachers. One such database is the *Schools and Staffing Survey (SASS),* (n=23,088). SASS was designed to meet the continuing need to collect data on characteristics of teachers and administrators and their work place conditions. The Schools and Staffing Survey responds to the literature call for data on teacher supply and demand, seeking to determine the scope of teacher shortages. Additionally SASS reacts to the lack of data on school work force answering questions such as "Who are our teachers and administrators?" Finally, SASS reverts to the lack of data on school conditions and program policies. Are schools responding to reform initiatives?

SASS was conducted in the 1987-88 school year, again in 1990-91, and will be conducted at 2-year intervals hereafter. At the time of this writing, only the 1987-88 data was available for secondary analysis.

Method

Sample Selection

The data for secondary analysis was taken from 23,088 Public School Teacher Questionnaires from the cross sectional data base, Schools and Staffing Survey (SASS). Teachers were carefully selected for their participation in the 1987-88 Schools and Staffing Survey. The following sections describe how public schools and teachers were selected for the 1987-88 SASS.

Selection of schools for SASS. Schools are the primary sampling unit for the SASS, and a sample of teachers are selected in each school. The public school sample of 9,317 schools was selected from the Quality Education Data (QED) file of public schools. All public schools in the file were stratified by the 50 States and the District of Columbia, and then by three grade levels (elementary, secondary, and combined). For each stratum within each state, sample schools were selected by systematic (interval) sampling with probability proportional to the square root of the number of teachers within a school.

Selection of teachers for SASS. All 23,088 school teachers in the teacher samples were selected from the 9,317 public schools. A list which included all full-time and part-time teachers, itinerant teachers, and long-term substitutes was obtained from each sample school. Within each school, teachers were stratified by experience; one stratum included beginning teachers, and a second stratum included all other teachers. Beginning teachers were those who, counting the 1987-88 school year, were in the first, second, or third year of their teaching career in either a public or private school system. Within each teacher stratum, elementary and secondary teachers were sorted

by subject. Elementary teachers were sorted by general elementary education, special education, and other. Secondary teachers were sorted by mathematics, science, English, social science, vocational education, and other.

There were 3,000 beginning, public school teachers in the sample. These teachers will be the focus of this analysis. "Beginning" teacher refers to a teacher who has been in the classroom full-time for less than three years.

Instrumentation

The Schools and Staffing Survey includes four components: (a) Teacher Demand and Shortage Questionnaire; (b) School Questionnaire; (c) School Administrator Questionnaire; and (d) Teacher Questionnaire. This investigation utilized only the Teacher Questionnaire. The 52-item questionnaire surveys teachers regarding demographic characteristics, teacher preparation and qualifications, career history and plans, teaching assignments, working conditions, and perceptions of school environment and the teaching profession.

Data Collection Procedures

The Census Bureau was the data collection agency for the Schools and Staffing Survey. The survey was conducted by mail with telephone follow-up. The basic sample of teachers was selected from the sample schools in each stratum so the teacher weights were approximately equal. Beginning teachers were not oversampled. Finally, an equal probability, systematic sampling scheme was applied to select the basic sample within each school.

In the data collection phase of the survey, a subsample of nonmail returns (57 percent of nonmail returns) was followed up by telephone during April, May, and June. This subsample had their weights adjusted to reflect the subsampling.

The investigators chose items from the 52 item questionnaire which appeared as representative of environmental factors that could possibly affect a

teachers decision to remain in or leave teaching as a career. The following demographic variables were used: age, gender, martial status, hours of schoolwork done outside the job. The rationale for each of these is described below.

The age variable (coded by year of birth) maybe a factor in a decision to stay in teaching for several reasons. First, a person entering the teaching field as a second or even third career choice, might be viewed as being more sure of his or her desire to teach. Also, the opportunity for making career changes decreases as one gets older, and therefore we would expect older beginning teachers would be less likely to leave teaching. However, in some research, age has turned out to be a negative factor in the ability to adjust to a beginning job (Freiberg, 1987). It is unknown if this is due to unrealistic expectations of the job or less flexibility in dealing with problematic situations.

If the gender variable (coded 0 = male and 1 = female) corresponds to findings from previous research, it is predicted that men tend to show the effects of job-related stress more than women, especially with physical symptoms (Belling and Moos, 1982). Additionally, Butler, Giordana and Neren (1985) indicated that men were less likely to seek out help when they encounter stress. Therefore, gender was chosen as a possible factor that could affect both the perception of the job and the decision to remain.

The marital status variable, (coded 1 = married, 2 = no longer married and 3 = single) might affect the decision to stay in teaching in two ways. First, the responsibility for spouse contribution to the support and survival of another person or persons might limit one's perceived options for changing careers regardless of the perceptions of the job. Also, the presence of another person with whom one can share experiences and solicit advice may also affect the perception of the job and the choice of whether or not to leave teaching. This

provision of support may be enough of a buffer to see one through the early years until a more realistic view of teaching can be achieved.

Hours of schoolwork done outside of the school day was selected as a variable because additional responsibility of working beyond the regular school day is considered a negative aspect of the teaching profession. The many extra hours of work may cause teacher burn out. Since beginning teachers take even longer than experienced teachers to process paperwork and prepare for instruction, this additional burden is even more draining. Comparing teaching to a job where you do not need to think about work from the end of one work day until beginning of the next, teaching begins to look very intimidating.

In addition to the demographic variables used in this study, four preestablished composit variables were utilized. Bobbitt (1991) conducted a factor analysis utilizing all questions in the Perceptions and Attitudes Toward Teaching section of SASS. Four composite factors emerged; administrative support, enforcement of rules, staff cooperation, adequacy of resources. The components used to form each variable are listed in figure 1.

Insert figure 1 here

Finally, the investigators chose an item requesting teachers to reflect on their career choice and indicate, knowing what they now know about teaching, if they would still choose teaching as a career. If would be expected that those who are unhappy enough to leave teaching would probably regret their decision to teach. However, it is possible that teachers who would now choose a different career if they could would nevertheless still stay in.teaching.

Data Analysis

Descriptive data including means, standard deviations, percentiles and correlations were run. A regression equation was used to establish the effect of the four composite variables, (administrative support, enforcement of rules, staff cooperation and adequacy of resources), student achievement level, after school work load, gender, age, marital status, and the second thoughts about the career choice on the intention to stay in teaching for 3,000 beginning elementary public school teachers. All nine variables listed in figure 1 were entered into the regression equation which used the question "How long do you intend to stay in teaching?" as the dependent variable. Items were entered in a stepwise pattern, allowing the variables to enter into the equation in order depending on size of the partial correlation with the dependent variable. As each variable was entered into the equation, the relationship between it and the intention to stay in teaching was revealed in the beta weights and its unique contribution to variance could be measured. To account for design effects, weighting was used in the statistical analysis. An estimated total was given by the sum of the sample values, each multiplied by its sample weight.

Results and Discussion

All variables listed except staff cooperation, were significantly related to beginning teachers' decisions to remain in teaching ($p<.05$). The result of entering all nine variables into the regression equation are listed in Table 1.

Insert Table 1 here

In addition to the correlational relationship of variables, it is important to also look at the size of the standardized beta weights, the order in which the

variables entered into the regression equation, and the direction of the relationship with the dependent variable.

The descriptive data reveal several noteworthy findings. Seventy-five percent of the 3,000 beginning teachers reported they worked with children in grade levels ranging from prekindergarten to grade six. The majority of the teachers worked at elementary school sites with 48% of the subjects working with children grades K-3, 52% working with grades 4-6. The average class size for the teachers was 28 students.

The teachers indicated they spend an average of 12.72 hours a week working on school related business during after school hours. Twenty-three percent of the sample worked as a teacher's aide previous to occupation in the field of education. Additionally, 46% of the sample implied they are working on advanced degrees by stating that their primary activity outside of teaching is attending a college or university.

Teacher salary schedules in the public school districts ranged from an average of $17,200 for teachers with a bachelor's degree and no experience, to $28,400 for those with a master's degree and 20 years experience. The beginning teacher made an average of $21,300. These findings are parallel to other demographic studies (Grissmen & Kirby 1987; Heyns, 1988; Murnani, Binger, Willett, 1989).

Upon close inspection of the demographic variables, several interesting results were found. Beginning teachers who were single, female and older than the norm were especially susceptible to the stresses and isolation of elementary school teaching. The negative correlation with gender indicates females stated that they were less likely to stay in teaching than their male counterparts in spite of the propensity of men to perceive more stress. Similarly, marital status showed a negative correlation here indicating singles may be more likely to

leave teaching than persons who are married. Although this may mean that one may feel freer to make a decision to change careers when there are no additional responsibilities, it could also be an indication of the isolation felt by some single beginning teachers.

Age was an important variable, entering the equation second only after the variable on reconsideration of teaching as a career. Since the year of birth, not age, was the variable used, the positive correlation indicates older beginning teachers are more likely to leave teaching than younger teachers supporting findings by Grissmer & Kirby (1987).

What appears most important in the results is the order of the regression equation. It is valuable to note the factors regarding the social environment that influence the decision to stay in teaching more than conditions of the job or the school. The presence of administrative support and the adequacy of resources to do one's job far outweighed the negative influence of discipline problems and unending paperwork. Another interesting finding is the fairly minimal connection between staff cooperation and the decision to stay in teaching. Examination of the components of the variable show that possibly they do not so much represent supportive and assisting cooperation among teachers as a unified approach to classroom management. While a truly supportive relationship provides information and assistance, the variable components for cooperation imply conformity. The actual perception of support items appear in the administrative support variable. This could infer that teachers do not need to conform to a set model of teaching common to all teachers in the school as much as they need to feel valued and accepted by other teachers and administrators in the school to feel they belong in the school.

Conclusions

There are aspects of teaching, influential ones according to this study, which can be controlled to help beginning teachers adjust to their role. The most important controllable variable is that of support. Information from other educators on how to cope with normal stresses of the job during the first year is invaluable in a teacher's decision to move forward in his or her career. Many studies over the years have urged states, universities, and districts to set up programs which provide beginning teachers with social and tangible support (Huling-Austin, 1987; Baum, 1987; Bogenschild, Lauritzen, and Mitzke, 1988). This support becomes even more important to older and single beginning teachers who may mistakenly be perceived as needing less support. All beginning teachers have similar needs and questions which will affect how they see themselves and how they do their jobs (Ryan, 1979; Zeichner, 1983). Therefore, all deserve the same level of support and guidance to help them as well as their students to have a more realistic and productive first year.

The results of this study suggest administrators, especially principals in elementary schools, have a profound effect on beginning teachers. If beginning teachers perceive principals as educational leaders, providing feedback on performance and opportunities for decision making, rather than solely as evaluators, the first years of teaching can become less intimidating, as stressful as they might be. It is possible that all support personnel need to be trained to be helpful to beginning teachers. In addition, beginning teachers must be encouraged to seek out support and resources without fear of looking incompetent to others. The network is easy to establish and certainly worth the effort of keeping good teachers in the profession. "A school can protect its investment in beginning teachers by giving them the necessary support from the

start through relationships that are both nurturing and evaluative" (Gelman & McGoldrick, 1980, p.33).

This study confirms previous research that aspects of the teaching climate can help to ameliorate conditions that may lead to attrition of beginning teachers, whereby supporting the work of Baum, l987; Bogenschild, Lauritzen, & Metze, 1988; and Holmes, Impink-Hernandez, & Terrell, 1988. This conclusion may strongly influence educational policy making. It supports the call for the provision of mentoring and other beginning teacher induction programs aimed at assisting teachers during their first years of teaching. When proper support is provided, perhaps stress is lessened, thus reducing a major contribution to attrition of beginning teachers teaching longevity (Fimian, 1986; Zabel & Zabel, 1982).

This study examined the specific types of support beginning teachers need to successfully accomplish their jobs. In contrast to previous studies, which tended to have small sample sizes and be specific to only one state, this study draws from a large nationwide sample. Hence, the results of this study have implications for national policy decisions regarding teacher induction and support during their first years as teachers.

References

American Association of Colleges of Teacher Education Task Force on Teacher Certification (1984). Teacher Education policy in the states. Washington, DC: Author. ED 271438.

Baum, (1987). Perceived problems of beginning teachers. Review of Educational Research, 54, 13-178.

Billings, A. G. & Moos, R. H. (1982). Work stress and the stress buffering roles of work and family resources. Journal of Occupational Behavior, 3(3), 215-295.

Billingsley, B. S. & Cross, L. H. (1992). Predictors of commitment, job satisfaction and intent to stay in teaching; A comparison of general and special educators. The Journal of Special Education, 25, 453-471.

Bogenschild, E. G., Lauritzen, P., & Metzke, L. (1988). A study of teacher attrition. Washington, DC: Supply/Demand Analysis Center, National Association of State Directors of Special Education.

Butler, T., Giordana, S. & neren, S. (1985). Gender and sex-role attributes as predictors of utilization of natural support systems during personal stress events. Sex Roles, 13(9), 515-524.

Commission on Teacher Credentialing/California Department of Education (1993). Success for beginning teachers: The California New Teacher Project, Executive Summary of California Education, 1(1), 27-31.

Fimian, M. J. (1986). Social Support & occupational stress in special education. Exceptional Children, 52, 436-442.

Fleming, R., Baum, A., Grisriel, M.M. & Gatchel, R. J. (1982). Mediating influences of social support on stress at three mile island. Journal of Human Stress. September, 14-21.

Freiberg, M. R. (1987). Social support and the performance of first year teachers. Unpublished dissertation. University of Wisconsin-Milwaukee. Milwaukee, Wisconsin.

Futrell M. H. (1989) Revitalizing teacher education: Where do we go from here? Teacher Education Quarterly, 16(2), 33-39.

Ganster, D. C., Fusilier, M. R. & Mayes, B. T. (1986). Role of social support in the experience of stress at work. Journal of Applied Psychology, 7(1), 102-110.

Gelman, D. & McGoldrick, N. (1980). Ready, set, go! Helping new teachers. Independent School, 40 (2) 33-37.

Grissmer, D. W., & Kirby, S. N. (1987). Teacher attrition: The uphill climb to staff the nations schools. Santa Monica, Ca: The RAND Corporation.

Gunderson, K. L. & Karge, B. D. (1992). Easing the special education teacher shortage: Are emergency credentials the answer? Teacher Education Quarterly. 19(3), 9-18.

Hall, G. E. (1982). Induction; the missing link. Journal of Tacher Education, 33(3), 53-55.

Heyns, B. (1988). Educational defectors; A first look at teacher attrition in the NLS-72. Educational Researcher, 17, 24-32.

Huling-Austin, L. & Murphy, S. C. (1987). Assessing the impact of teacher induction programs: implications for program development. Paper presented at the annual meeting of the American Educational Research Association. Washington D. C.

Lagana, J. (1970). What happens to attitudes of beginning teachers. Danville, Illinois: Interstate Printers and Publishers.

The Metropolitan Life Survey of Former Teachers in America (1186). American Educator, 4, 34-41.

Mekzke L. K. (1988). A study of the causes of teacher attrition in regular and special education in Wisconsin (Doctoral dissertation, Marquette University). Dissertation Abstracts International, 42, 42A.

Moos, R. H. (1976). The Human Context: Environmental Determinants of Behavior. New York: John Wiley and Sons.

Murname, R. J. Singer, J. D. & Willett, J. B. (1989). The influences of salaries and opportunity costs on teachers career choices: Evidence from north carolline, Harvard Educational Review, 59, 325-356.

National Center for Educational Statistics (1991). Characteristics of stayers, movers, and leavers: Results from the teacher follow-up survey, 1988-89. Washington D. C. : U. S. Department of Education, Office of Educational Research & Improvement.

Smith-Davis, J. (1990). Percentage change-Teachers by state to 1993. SpecialNet, Supply Demand Bulletin Board [Msg: FGJB-4583-8I08].

Zeichner, K. (1984). Individual and institutional factors related to the socialization of beginning teachers in first years of teaching: what are the pertinent issues? (Griffin, G. & Hukile, H. eds.) Research & Development Report 9051, University of Texas at Austin.

Zabel R. H. & Zabel, M. K. (1982). Factors in burnout among teachers of exceptional children, Exceptional Children, 49, 261-263.

Table 1

The decision to remain in teaching in relation to:

Variable	Stand. Beta	I
Still choose teaching as career	.420054	161.58*
Year of birth	.147043	57.908*
Administrative support	.058444	20.210*
Available resources	.038661	14.863*
Gender	-.025473	-10.111*
Marital status	.024123	11.982*
Rule infractions	-022159	-6.902*
After school work	.015555	-5.991*
Staff cooperation	.005598	1.900

*Significant at .05 level (using weights)

R2= .20999. This indicates that approximately 21% of the variance in the dependent variable, how long beginning teachers intend to stay in teaching, is accounted for by the nine variables in the table.

Figure 1:

Composite Variable: Administrative Support

1. administrators use fair evaluation
2. teachers know what is expected of them by principals
3. administration is supportive and encouraging
4. teachers participate in decision-making for the school
5. principal has the ability to get resources for the school
6. principal gives feedback on teaching
7. principal communicates expectations for school to staff
8. school recognizes teachers who are doing a good job
9. goals and priorities for school are clear

Composite Variable: Incidence of Rule Infractions

1. amount of misbehavior at the school level (reverse)
2. parental support
3. principal enforces school rules and supports teacher in enforcement of rules
4. personal philosophy is compatible with school rules
5. student tardiness (reverse)
6. motivation to improve teaching

Composite Variable: Cooperation Among Staff

1. consistent enforcement of school rules among teachers
2. shared beliefs and values among teachers
3. cooperative effort by teachers
4. conscious effort to coordinate content of courses with other teachers

Composite Variable: Adequacy of Resources

1. salary
2. availability of necessary materials
3. interference of paperwork and other non-teaching duties
4. class size